

What is claimed is:

- 1 1. A method for processing a circuit board, the circuit board including an area
2 array bonding site, the method comprising:
3 overlaying a protective cover over the bonding site by registering a
4 plurality of posts secured to one of the protective cover and the circuit board
5 into a plurality of apertures disposed in the other of the protective cover and
6 the circuit board;
7 performing a fabrication process on the circuit board while the
8 protective cover is overlaid on the circuit board; and
9 removing the protective cover.

1 2. The method of claim 1, wherein overlaying the protective cover over the
2 bonding sites comprises an adhesiveless contact between the protective cover and the
3 bonding site.

1 3. The method of claim 1, wherein the fabrication process comprises:
2 overlaying a stencil on the circuit board, the stencil including a
3 protective cover pocket registered to the protective cover on the circuit board;
4 screen printing the circuit board; and
5 removing the stencil.

1 4. The method of claim 1, wherein performing the fabrication process
2 includes:
3 placing the circuit board into a wave soldering fixture; and
4 performing wave soldering on the circuit board.

1 5. The method of claim 1, wherein performing the fabrication process is
2 preceded by placing the circuit board in a frame, the frame operable to support an
3 opposite face of the circuit board.

1 6. The method of claim 1, wherein performing the fabrication process
2 includes:
3 placing a surface mount technology (SMT) component on the circuit
4 board; and
5 performing infra-red (IR) solder reflow on the circuit board.

1 7. The method of claim 1, wherein performing the fabrication process
2 includes reworking the circuit board.

1 8. The method of claim 1, wherein removing the protective cover includes
2 tipping the circuit board.

1 9. The method of claim 1, wherein the circuit board includes the plurality of
2 apertures, the apertures passing through the circuit board, and the protective cover
3 includes the plurality of posts, wherein removing the protective cover includes
4 pushing one of the plurality posts through the corresponding one of the plurality of
5 apertures.

1 10. The method of claim 1, wherein the area array bonding site comprises a
2 plurality of land grid array terminal pads

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- 1 11. An assembly comprising:
- 2 a circuit board;
- 3 an area array bonding site on a surface of the circuit board; and
- 4 a protective cover overlaying the bonding site, the protective cover
- 5 removably registered to the bonding site by a plurality of posts secured to one
- 6 of the protective cover and the circuit board into a plurality of apertures
- 7 disposed in the other of the protective cover and the circuit board.

- 1 12. The assembly of claim 11, wherein the protective cover includes an
- 2 adhesiveless surface contacting the bonding site.

1 13. A method of fabricating a protective cover for processing a circuit board,
2 the circuit board including an area array bonding site on a surface of the circuit board,
3 the circuit board further including a plurality of apertures forming a footprint on the
4 surface of the circuit board, the method comprising:

5 sizing base material into a cover shape corresponding to the footprint
6 of the plurality of apertures and the area array bonding site on the surface of
7 the circuit board; and

8 bonding a plurality of posts onto the base material in a pattern
9 corresponding to the footprint of the plurality of apertures in the circuit board.

1 14. The method of claim 13, further comprising removably sizing each of the
2 plurality of posts to a corresponding one of the plurality of apertures.

1 15. The method of claim 13, wherein the base material comprises epoxy glass.

1 16. The method of claim 13, wherein bonding the plurality of posts onto the
2 base material further comprises:

3 placing the base material into a first fixture, the first fixture including a
4 plurality of lateral location guides to position the base material at a
5 predetermined location;

6 placing a second fixture into contact with the base material, the
7 plurality of lateral location guides of the first fixture positioning the second
8 fixture into the predetermined location, the second fixture including a plurality
9 of guide holes registered to the plurality of apertures;

10 applying a bonding agent for bonding each of the plurality of posts to
11 the base material; and

12 inserting each of the plurality of positioning posts through the
13 corresponding one of the plurality of guide holes into bonding contact with the
14 base material.

1 17. The method of claim 16, wherein applying the bonding agent for bonding
2 each of the plurality of posts to the base material further comprises:
3 injecting the bonding agent onto base material through each of the
4 plurality of guide holes; wherein each guide hole includes a countersunk
5 expansion for allowing a bead of bonding agent to form when one of the
6 plurality of posts is inserted.

1 18. The method of claim 13, further comprising placing the first fixture in an
2 oven for curing the bonding agent, the first fixture supporting the base material,
3 second fixture, bonding material and plurality of posts.

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1 19. A cover for protecting an area array bonding site on a surface of a circuit
2 board, the circuit board having a plurality of apertures, the cover comprising:
3 a base member having a first face and second face, the base member
4 shaped to at least correspond to said area array bonding site; and
5 a plurality of posts coupled to the first face and registered for said
6 plurality of apertures.

1 20. The cover of claim 19, wherein the first face of the base member
2 further includes a recess corresponding to said area array bonding site.

1 21. The cover of claim 19, further comprising:
2 a graspable extension coupled to the second face of the base member.

1 22. The cover of claim 19, wherein each of the plurality of posts includes a
2 diametral slot.

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